92929

November-12-12 3:29:57 PM

Required Date: 03/12/2012

İtem ID:

649.4812

12/11/2012

Accept

N900040100

Setup Start

Revision ID:

Item Name: **Start Date:**

Shim

Start Qty: 10.00

Req'd Qty: 10.00

10

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: MLJ Date: 12-11-13 Tooling:

QC: SPC (Y/N):

Date: Date:

Run

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
649.4800	Α								
110		0.00			• ••				
110 Waterjet	Memo	0.00						હા	2-11-18
FLOW CNC Wateriet	1-Cut as ner Dwg								

3034.050

Prog Rev:

2-Deburr if necessary

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

1812-11-12

Quality Control

NCR:	Yes	/ No				WORK ORDER NON-O	100	VFOR	MANCE / UPI	DATE		•			
											C	QA Closed:	Da	ate:	*
Work Ord	er:					DISPOSITION				AGAINST D	EP	ARTMENT/	PROCESS		•
Part I	No.					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite			Water Jet d. Eng. Coor e/Packaging Supplier		Engineering Quality Other
Root			6.			ption of work order update		nitial		ion		Sign &			
Cause	_	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desci	ription	+	Date	Verification	n	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved						· .									
							AUL	T CATE	GORY						
Landi		Bending Centre No Cracks Crushed/ Cuffs Heat Trea	Crimped.		o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		1 '	ion Incomplete ions Incomplete/U enance eled	Jnclear		Ovalized Over/Under Part Incorrect Part Lost/Mi Part Moved Positioned W	ct ssing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Rinnles in	·	TUDE	+	Drill Holes	-	Officet	A	L		- UWEI LUSS/.	Juige		Other

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 92929

November-12-12 3:29:57 PM

Item ID: 649.4812 Accept *N900040100* Setup Start Revision ID: Item Name: Shim 12/11/2012 **Start Date: Start Qty: 10.00 Cust Item ID: Required Date:** 03/12/2012 Req'd Qty: 10.00 **Customer:** Reference: Run Approvals: **Process Plan:** Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject **Work Center ID** Description **Run Hours** Qty Code **Qty** Number Stamp 130 QC8- Inspect parts - second check *130* 0.00 Memo Quality Control 160 Outsource process-Anodize per QSI017 4.1.10.1 0.00 *160* Outsource4 0.00 Memo ISSUE P/O: 18506 Outsource process - Anodize

170

Receive & Inspect for Damage & Mat'l Certs

0.00

170

Packaging

0.00

Insp.

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

Packaging

Memo

NCR: Y	es / No				WORK ORDER NON-	CON	FOR	MANCE / UP	DATE	QA Closed:	 Date	
Work Orde	er:	-			DISPOSITION				AGAINST DE			
Part N	lo	,			Rework Scrap Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	lo				Work Order Update	<u>ا</u> ا		Large Fab	Composite	<u>j</u>	Supplier	لــا لـ
Root				Descri	ption of work order update	In	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup] [
Other												
Process												·
Supplier												
Training												
Unapproved		1										
					F	AULT	CATE	GORY				
Landir	ng Gear				General							
	Bending				Bend		Grain			Ovalized		Pressure/Forced
Ī	Centre No	ot Concei	ntric to (o/s 🗀	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	П	Inspect	ion Incomplete		Part Incorre	ct	Weld
Ī	Crushed/	Crimped.			Burrs	П	Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
Ī	Cuffs				Contamination	\vdash		enance		Part Moved	_	
ļ	Heat Trea	it			Countersink	H	Mislabe	eled		Positioned V	Vrong	
Ţ	Inspection		Tube		Cut Too Short	\vdash	Misread			Power Loss/		Other
ţ	Ripples in	-			Drill Holes	\vdash	Offset		<u> </u>		Ŭ L	
Ì	Torque W		xtrusion	, <u> </u>	Drawing	\vdash		Calibration				
Ì	Turning S				Finish	\vdash		Sequence				
Ì	Wave/Tw	· · ·			Folio	\vdash		Dimensions				

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

QC

Quality Control

November-12-12 3:29:57 PM Item ID: 649.4812 Accept *N900040100* Setup Start .Revision ID: Item Name: Shim **Start Date:** 12/11/2012 **Start Qty: 10.00 Cust Item ID: Required Date:** 03/12/2012 Req'd Qty: 10.00 **Customer:** Reference: Run **Approvals: Process Plan:** Tooling: Date: Date: QC: SPC (Y/N): Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Qty Qty Code Number Stamp 180 QC5- Inspect part completeness to step on W/O 0.00 *120*) j 0.00 Memo Quality Control 190 0.00 *190* įί SprayPaint 0.00 Memo Spray Painting PRIME IAW MIL-P-23377J TYPE1 CLASS N AS PER DWG. (SEE NOTE 2) PRIMER BATCH: 123693 200 QC14- Inspect Spray Paint 0.00 *200*

0.00

Memo

											DQA:	Date:	•
NCR:	⁄es	/ No				WORK ORDER NON-C	ONFO	RIV	IANCE / UPD	DATE	·		_
											QA Closed:	Date	
Work Orde	ar.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part N	- - No.					Rework Scrap Use-as-is Work Order Update	The	N erm	Skid-tube Machining oforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root			:		Descri	l ption of work order update	Initial		Acti	ion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chief E	ng	Descri	iption	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling	П			}									
Operator													
Material	П												
Setup 🔭 🗕													
Other 💐													
Process	П												
Supplier	П			ŀ									
Training		,											
Unapproved	П												
	•					F	AULT CA	TEG	ORY				
Landi	ng G	ear				General				,			
	\Box	Bending				Bend	Grai	in			Ovalized		Pressure/Forced
		Centre No	t Conce	ntric to	o/s	BOM/Route	Hard	lwar	·e		Over/Under	tolerance	Temperature/Cure
	П	Cracks				Broken/Damaged	Inspe	ectio	on Incomplete	·	Part Incorre	ct	Weld
	\square	Crushed/0	Crimped.			Burrs	Instr	ucti	ons Incomplete/U	Jnclear	Part Lost/M	issing	Wrong Stock Pulled
	П	Cuffs				Contamination	Mai	ntei	nance		Part Moved	_	_
		Heat Trea	t			Countersink	Misla	abel	ed		Positioned \	Vrong	
	П	Inspection	n Strip in	Tube		Cut Too Short	Misr	ead			Power Loss/	Surge	Other
	${oldsymbol{ o}}$	Ripples in	-			Drill Holes	Offse	et		_	_		· · · · · · · · · · · · · · · · · · ·

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

November-12-12 3:29:57 PM

92929

Page 4

Item ID: 649.4812 Accept *N900040100* Setup Start Revision ID: Item Name: Shim *10* Start Date: 12/11/2012 **Start Qty: 10.00 Cust Item ID: Required Date:** 03/12/2012 Req'd Qty: 10.00 *10* **Customer:** Reference: Run Process Plan: Approvals: **Tooling:** Date: Date: QC: SPC (Y/N): Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Plan Reject Reject Accept Insp. Work Center ID Description **Run Hours** Qty Number Stamp Code Qty Identify as per dwg & Stock Location / 374 210 0.00 *210* Packaging 0.00 Memo Packaging ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV*** 220 QC21- Final Inspection - Work Order Release 0.00 MI 13-01-09 0.00 Memo Quality Control

												DQA:	Date:	
NCR:	Yes	/ No			,		WORK ORDER NON-C	100	NFORM	ANCE / UPI	DATE	•		•
							·					QA Closed:	Date:	
Work Ord	er:						DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part NCR	No.						Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube Machining oforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Des	crip	otion of work order update		nitial	Act	ion	Sign &		
Cause		Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
oc/Data quip/Tooling perator Material etup ther rocess upplier raining napproved														
							F	AUL	T CATE	GORY				
Land	ng (7			,		General		1		_	٦		-
		Bending Centre No Cracks Crushed/O Cuffs Heat Trea Inspection Ripples in	Crimped t n Strip in		o/s		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes			on Incomplete ions Incomplete/U nance Ied	Jnclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct Isssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	\vdash	Torque W		xtrusion	1		Drawing	\vdash	4	Calibration				-
	\Box	Turning S				_	Finish		1	equence		-		

Outside Dimensions

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

November-12-12 3:30:01 PM

Work Order ID: 92929

649.4812

Parent Item Name: Shim

92929

649 4812

Start Date: 12/11/2012

Required Date: 03/12/2012

Start Qty: 10.00

Required Qty: 10.00

Comments:

Parent Item:

IPP REV:A 12.11.01 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050		Purchased	No		-	110	sf	171.1984	0.389	4.094737	4.5		
M2024T3	S 050								**		1212-	-16-18	

2024-T3 .050 sheet

Location .	Loc Qty	Loc Code	*
MAT022	171.1984204		(n)
117684	11.8		
121216	45.6484204		
121889	113.75		121 8801

											DQA:	Date:	
NCR:	es /	/ No				WORK ORDER NON-C	CON	FORN	MANCE / UPDA		QA Closed:	Date:	
Work Orde	or.					DISPOSITION	T			AGAINST DE			
Part N						Rework Scrap Use-as-is		ı	Skid-tube Machining foforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	No					Work Order Update]		~ ~	Composite	Necy Stor	Supplier	other.
Root					Descri	ption of work order update	In	itial	Actio	n	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Chie	ef Eng	Descrip	tion	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator													į
Material													
Setup													
Other													
Process													
Supplier													
Training			1							•			
Unapproved													
						F.	AULT	CATE	GORY				
Landi	ng Ge	ar				General	_				-		-
	Шв	ending				Bend	Щ	Grain			Ovalized		Pressure/Forced
	c	entre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	L c	racks				Broken/Damaged		nspecti	on Incomplete		Part Incorre	ct	Weld
	c	rushed/0	Crimped.			Burrs		nstruct	ions Incomplete/Un	clear	Part Lost/Mi	ssing	Wrong Stock Pulled
	∐ c	uffs				Contamination		Mainte	nance		Part Moved		
]н	eat Trea	t			Countersink		Mislabe	led		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



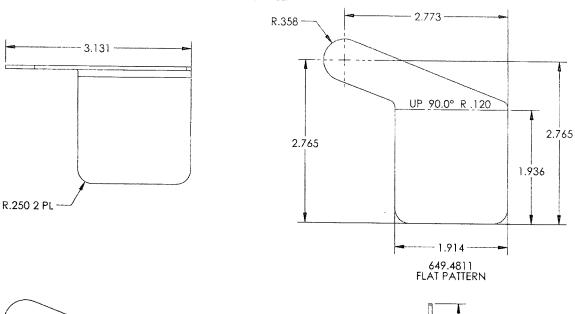
AL MATERIAL: ALUMINUM 2024-13 PER AMS-QQ-A-250/4

FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III. CLASS 2. COLOR BLACK-PRETREAT PR-146 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N

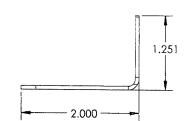
- 3. DEBURR AND BREAK ALL SHARP EDGES
- 4. IDENTIFY IAW MPP-120. LASER ETCH P/N AND REVISION 12PT, CENTURY GOTHIC.

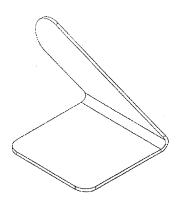
PART DIMENSIONS CONTROLLED BY CAD MODEL: FILE NAME: 649.4816 DOUBLER.SLDPRT

6. INSPECTION DIMENSIONS SHOWN WITH FINISH APPROX. 3-5 MIL MAX PER FACE.



.063





649.4811

SHOWLETY REAL PATO

ENGIN, GGNG

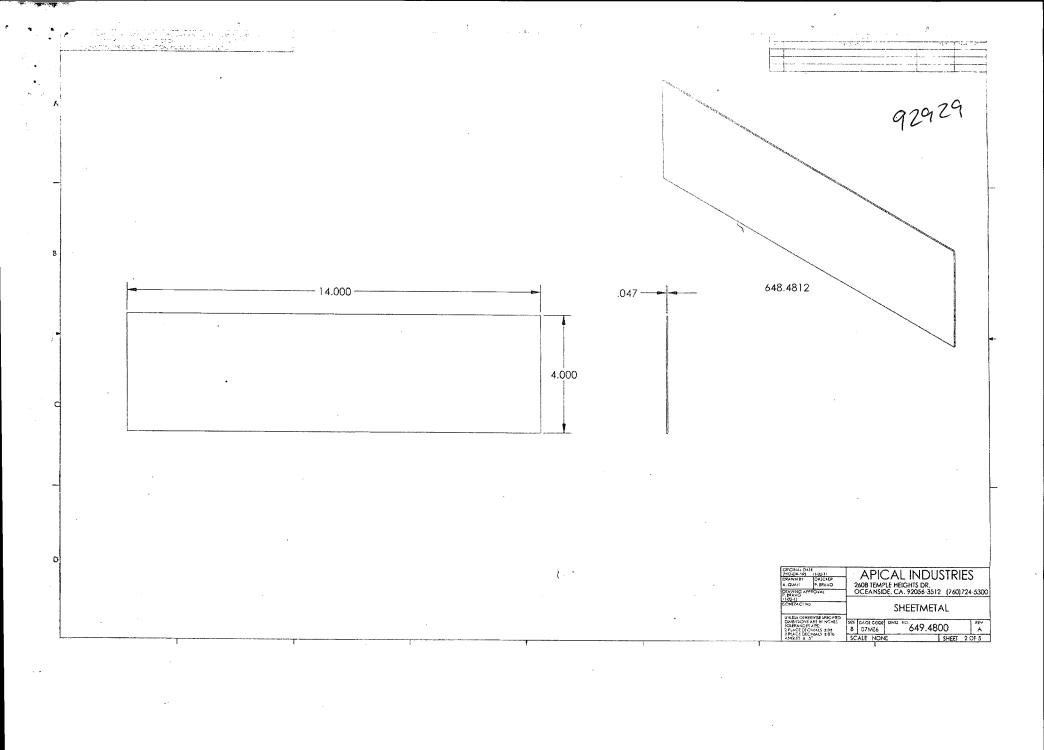
UNCONTROL TO COPY

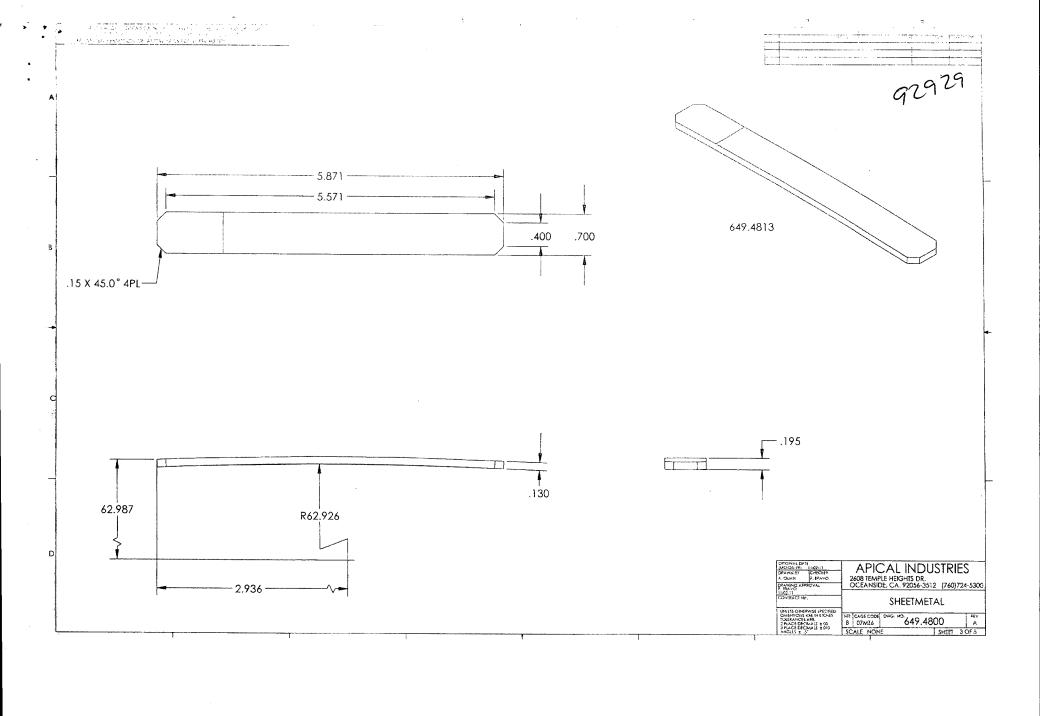
SUBJECT TO AMENDMENT

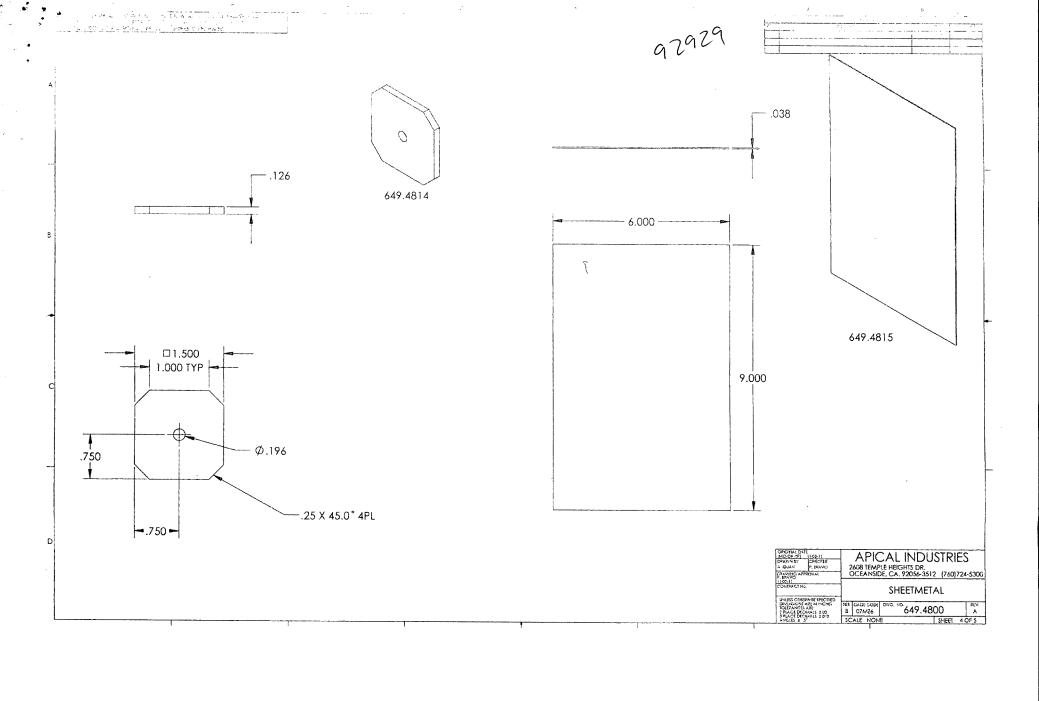
WITHOUT NOTAL WORK ORDER 0_97979_MLJ 12-11-13

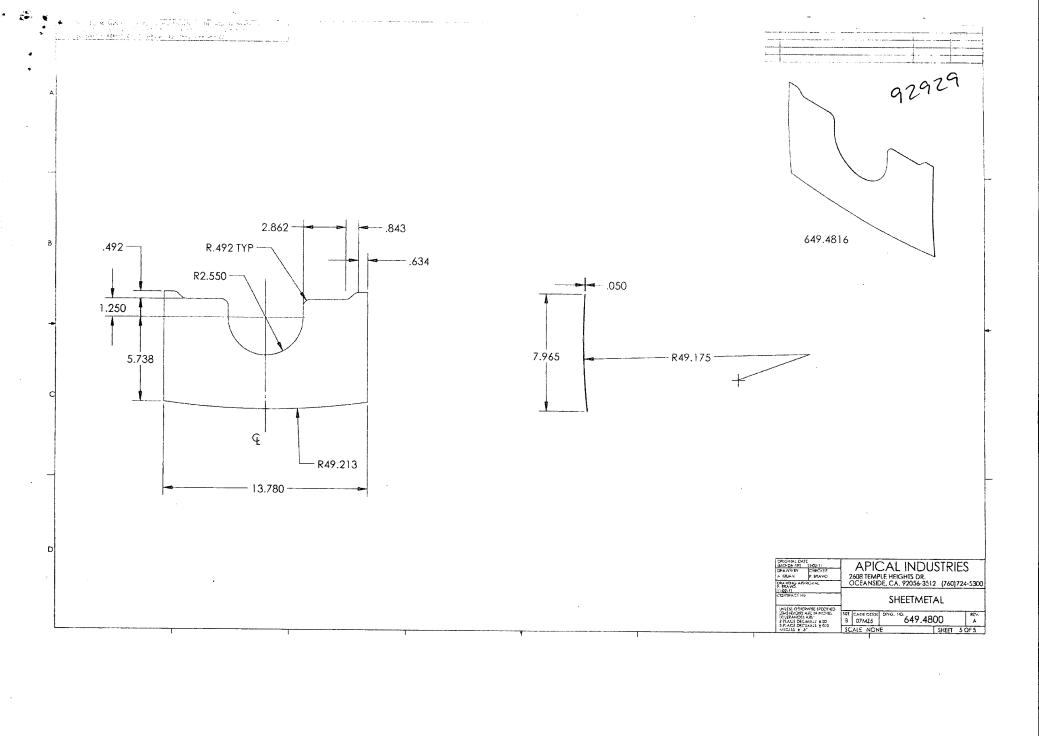
	7	649.4816	DOUBLER		2/3
	6	649.4815	SHIM		2
	5	649.4814	DOUBLER		2
	4	649.4813	SHIM		[2]
	3	649.4812	SHIM		[2]
	2	649.4811	CLIP		12
	1		DELETED		
F	H DMI	PART#	DESCRIPTION	MATL	SPEC.
QTY			PARTS LIST	*****	
NEXT A	[2] Y22	DRIGHAL DATE (MO-DA-IR) 11-02-11 DRAWN BY CHECK			TRIES
649.4	700	A. GUAN P. BEAN	○ 2608 TEMPLE HER		(740)724.6200

	1		<u> </u>	DEL	ETED					
	FIND #	PART #	0	ESC	RIPTIO	N	MATL	. S	PEC.	
QTY				PART	S LIST					
	7 ASSY (S) 9,4700	A. GWN P. B	CKER FAYO	260	38 TEMP	LE HEIG	INDU SHTS DR.	•		
		DPAWING APPROVA P. BRAVO 11-02-11 GONEPACT No. UNLESS CHEFWEE		00	CEANSIC		92056-3511 EETMET	<u></u>	724-530	20
		DATENSIONS ARE INCOMERSIONS ARE DECIMALS ARE DECIMALS ARGUS & 3"	# 03	B (AGE CODE 07M26 LE NON	ENVO. NO	649.48	OO SHEET	A 1 OF 5	. 1









APICAL

DART AEROSPACE LTD	Work Order: 93939
Description: SHIM	Part Number: (44-481)
Inspection Dwg: (44-4%) Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.000	4 .00=	4.002	2		V BOZ	
14,000	1 .005 1 -007	14.000	1,		T (Ba)	
14,005	12 -007	1048	2	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	V	
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			90 J.C. 630			
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			·			

Measured by: }	Audited by: 25	*	Preliminary Approval:	
Date: 12-11-18	Date: 10 /1 /9	2	Date:	·

Rev	Date	Change	·.		Revised by	Approved
E	10.04.14	Added preliminary approval		建铁矿	KJ	



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62107

Date: 12-Dec-12

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

	1 ax. 013-032-116		711: 013-032-5200	Fax: 613-632-1185			
Terms		Ship Via					
							
Quantity	Description						
1	Part: ASST		Rev:	·			
lot	11 1		1101.				
-	8 PCS 647.1610						
	5 PCS 647.1612						
	2 PCS 647.1713						
	6 PCS 647.1811						
	PC 647.1816						
	1 PC 647.1817						
	8 PCS 647.1818 11 PCS 646.3210						
	20 PCS 646.3313						
	10 PCS 646.3717						
	20 PCS 646.3717						
	16 PCS 647.4610						
	10 PCS 649 4811						
đ	10 PCS 649.4812)/ /						
1	24 PCS 649.4814						
	30 PCS 649.4815						
	6 PCS 647.7913 3 PCS 647.7919						
·	10 PCS 647.7919						
	10 PCS 647.9011						
	15 PCS 647.9012						
	40 PCS 647.9013						
	60 PCS 646.9710						
	HARD ANODIZE BLACK						
	MIL-A-8625 TYPE III CLASS 2						
	Job: 20120768	PO: PO18506	Line:				
	Certificate of Co	onformance					
	A.T.G. Industries certifies that all items in this shipment are in conformance						
	with all requirements, specifications and drawings referenced in the purchase order.						
	ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY						
	DATE: 12/12/12		. //				
,	WAIE: 14/14/11						
		Page 1 o					



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62107

Date: 12-Dec-12

Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

DART AEROSPACE LTD

To

Ph: 613-632-5200

Ph: 613-632-5200

Fax: 613-632-1185 Fax: 613-632-1185 Terms Ship Via Quantity Description CERTIFIED SIGNATURE: RECEIVER SIGNATURE :

			বঞ্চ
4 Jan 1			
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	•		
		•	
		•	
2s.			